A STUDY ON SCREEN VIEWING AND SLEEP AMONG LOW AND HIGH ACHIEVERS OF SCHOOL CHILDREN IN A SELECTED SCHOOL AT KRISHNAGIRI.

BY

30083614

A DISSERTATION SUBMITTED TO THE TAMILNADU Dr.M.G.R. MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN NURSING

MARCH – 2010

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CHAPTER – I

INTRODUCTION

Sleep is the golden chain that ties health and our bodies together.

- Thomas Dekker.

Among the many blessings parents seek to pass on to their children is a life of good sleep habits an unglamorous but an important one. Short changing sleep has serious adverse consequences. American children get too little sleep, with major adverse implications for their cognition ability, judgment, behavior and physical health. Although there are many reasons for the lack of adequate sleep among children, media use is frequently used as one probable culprit.

21st century has witnessed technological advancement and rapid changes in mass media. The traditional mass media like radio, print material etc, are losing their importance nowadays, whereas the newer ones such as video games, computer and television are gaining more importance among teens and children. They play an inevitable role today in the life of young children.

MEDIA

The oldest form of mass media–books, newspapers and magazines contributes to children's competence in almost every direction and provides enjoyment. Fairy tales have remained for generations and the mainstay of young children's literature helps to develop imagination .They are now believed to provide an excellent medium for explaining puzzling and important topics such as death, stepparents and inner feelings and turn moils. Comic books

and other pulp reading material have been popular in every generation, sometimes at the expense of the literature provided by schools, libraries and parents.

Television has become one of the significant socializing agents in the lives of young children. The content of programs and commercials provides multiple sources for acquiring information, modeling behaviors and observing value orientations. Television exposes children to a wider variety of topics and events than they encounter in day to day life. Too much of television viewing brings obesity, behavioral problems, irregular sleep, poor academic performance etc among school children.

The use of video games is supported in relation to their effects. Violent video games can cause people to have more aggressive thoughts, feelings, and behaviors and decrease empathetic, helpful behaviors with peers. Sudha (2007)

Children begin to learn computer even when they are very young as it is one of the subject taught in many schools even from first standard. They are exposed to many computer games, internet etc.

SLEEP

Normal sleep requirement of early adolescent is 8.5-9.5 hours of sleep. At the same time, there is an increasing demand on their time from school (e.g., homework), sports and other extracurricular and social activities. In addition, school-aged children become more interested in TV, computers, the media and Internet as well as caffeine products – all of which can lead to difficulty in falling asleep, nightmares and disruptions to their sleep. In particular, watching TV close to bedtime has been associated with bedtime resistance, difficulty in falling asleep, anxiety around sleep and sleeping fewer hours.

Sleep problems and disorders are prevalent at this age. Poor or inadequate sleep can lead to mood swings, behavioral problems such as hyperactivity and cognitive problems that impact on their ability to learn in school.

IMPACT OF MEDIA USE

The American Academy of Pediatrics recommends limiting a child's use of TV, movies, video and computer games to no more than an hour a day.

Too much screen viewing has been causing irregular sleep among children who resist going to bed and have trouble in falling asleep. Impaired academic performance among elementary students who have TV in their bedrooms tend to perform worse on tests than those who do not have .

Besides these, there are many other effects of screen viewing such as too much screen viewing has been causing obesity among children who watch TV more than 2 hours, behavioral problems among children who watch excessive amounts of screen are more likely to bully, have attention problems and show signs of depression or anxiety than children who don't have and also excessive screen time leaves less time for active, creative play. Kaiser Family Foundation (2005)

NEED FOR THE STUDY

In today's society, electronic media are thoroughly integrated into the fabric of life, with television, movies, videos, music, video games and computers central to both work and play.

Globally television reigns supreme as the most important technology in children's lives. Recent studies indicate that even the youngest children in the united states are using a wide variety of screen media, many at higher levels than recommended by child development professional (Rideout,Vandeowater And Wartella 2003)

72 percent of U.S middle school students spend more than 3 hours each day outside of school in front of television, mobile phone or computer screen rather than doing homework or other academic related activities.(Ratheon)

Level of usage of select media according to US teen internet users, May 2009				
	Non user	Light user	Average user	Heavy user
Internet	-	16%	38%	45%
Television	-	19%	48%	32%
Video games	14%	28%	28%	29%
E mail	8%	27%	37%	26%

Bond Paul (2009)

Computer video display terminals have revolutionized the home and office work habits of millions of people. According to 1997 US census bureau report, half of all children had computer at home and approximately 71% of children operate computers at school. Today probably every child has an access to computer either at school, at home or in the library.

Children of only two other countries –China(33 hrs) and Japan (31 hrs) seemed to spend fewer hours online, according to the Norton online living report 2009,which was based on a survey of adults and children in 12 countries.

The use of computers in India is growing exponentially. The amount of time one spends looking at a computer screen is also increasing. Indian children on an average spend 34 hours online every month against the global average of 39 hours, reveals a recent survey.

It covered 6,427 adults aged 18 years and older (including 1,297 parents of children aged between 8 and 17) and 2,614 children aged between 8and 17 who spent one or more hours.(Ramachandran ,The Hindu).The majority of parents feel that children spent too much time online and 48% of Indian children themselves agreed that they did.

South Indians watch more TV than rest of the country, according to a recent study by TV viewer ship analysis organization TAM (Television Audience measurement). South Indians watched 30 minutes more of TV every weekday than their counterparts in the rest of the country, while on week ends, they outdo the rest by an hour, show the figures declared at the FICCI (Federation of Indian chambers of commerce and industries) frames media and entertainment business conclave. While rest of the country watched TV for an average of two hours and 30 minutes every weekday, south Indians did it for two hours and 50 minutes.

Tamilnadu has been found to watch 6.5 episodes a day. 8 percent of viewship in Tamilnadu is late night TV, while north Indians were found to watch more TV after 10pm (L.V. Krishnan, CEO, TAM)

Schierl (2007) conducted a study to investigate the effects of singular excessive television and computer game consumption on sleep pattern and memory performance of children. The results suggest that television and computer game exposure affect children's sleep and deteriorate verbal cognitive performance, which supports the hypothesis of the negative influences of media consumption on children's sleep, learning and memory.

Bahamman A, et.al., (2006), conducted a study to estimate sleep duration in Saudi elementary school children. Parents of elementary school children were surveyed regarding their children's bedtime, rise time, sleep duration at night and daytime nap duration during week days and week ends. A questionnaire inquiring about demographical data, specific sleep problems and habits and home environment was completed by the parents. As a result the study comprised 511(50.5%) boys and 501 (49.5%) girls. During weekdays, bedtime for the whole group was 21.3+/-1.8 hours, rise time was5.9 +/- 0.5 hours. Total sleep time (TST) was 8.4 +/- 1.1 hours and TST, nap was 9.98 +/- 1.3 hours.

Johnson J.G et.al., (2004) conducted a study to find association between television viewing and sleep problems among 759 mothers from upstate New York and their offspring were interviewed during the early adolescence (14 years), middle adolescence (16 years) and early adulthood of the offspring (22 years). As a result adolescent who watched 3 or more hours of television per day during adolescence were at a significantly elevated risk for frequent sleep problem by early adulthood. Adolescent who reduced their television viewing from 1 hour or longer to less than 1 hour per day experienced a significant sleep problems.

Based on the above scenario the investigator found that there are very few studies related to sleep and screen viewing. Among nursing studies Susan .T. Tittu(2005), Kamatchi (2009) and Leelamma(2008) studied about visual acuity and body mass index and they did not concentrate on the sleep factors which propelled the investigator to conduct a study on screen viewing and sleep among school children in selected schools at Krishnagiri.

STATEMENT OF THE PROBLEM

A study on screen viewing and sleep among low and high achievers of school children in a selected school at Krishnagiri.

OBJECTIVES

1. To find the association between screen viewing and sleep among low and high achievers of school children.
2. To test the association between the background factors and sleep among low and high achievers of school children.
3. To test the association between the background factors and screen viewing among low and high achievers of school children.

HYPOTHESIS:

H_1 : There will be a significant association between screen viewing and sleep among high achievers of school children.

H_2 : There will be a significant association between screen viewing and sleep among low achievers of school children.

H_3 : There will be a significant association between the background factors and sleep among low and highachievers

H_4 : There will be a significant association between the background factors and screen viewing among low and highachievers.

OPERATIONAL DEFINITION

1) Screen viewing- refers to watching television and use of computer by school children as measured by questionnaire. Screen viewing was measured in terms of screen viewing scores.

2) Sleep - Sleep is a cyclical physiological process that changes with long periods of wakefulness. Sleep was measured as sleep scores by items in the questionnaire.

3) School children –refer to those children aged between 13 -15 years. For the purpose of study they were classified as follows.

High academic achievers - refer to the students who hold their academic performance within the first 10 ranks in the class as stated in the rank cards.

Low academic achievers- It refer to the students who were in the last 10 ranks in the class as stated in the rank cards, based on their academic performance.

4) Background Factors - refer to the factors which were thought to influence the screen viewing or sleep among school children, such as age, sex, family income, educational status of father, educational status of mother, failure in previous classes ,study habit ,problem with teacher, peer, subject and none, parental motivation, parental fight, use of screen by family members, use of long term medication, cups of tea & coffee per day, finding fresh to study.

ASSUMPTIONS

1. The children would cooperate during the study.
2. The information provided by school children would be true.
3. The items in the questionnaire were adequate to measure the effects of screen viewing and sleep.

DELIMITATIONS

1. The children studying in Sri Vijay Vidyalaya Matriculation School in Krishnagiri.
2. Children selected by quota sampling.
3. Data collection by semi structured self administered questionnaire.

CONCEPTUAL FRAMEWORK

Polit and Hungler state that a conceptual framework is interrelated concepts on abstractions that are assembled together in some rational scheme by virtue of their relevance to a common scheme. It is a device that helps to stimulate the research and the extension of knowledge by providing both direction and impetus.

Conceptual framework was developed based on the general system theory. A system is made up of separate components the parts rely on one another, are interrelated, share a common purpose, and together form a whole. General system theory explains the relationships between whole and parts and makes predictions about these parts of whole will functions.

Input is any form of energy, information, material or human that enters into the systems through its boundaries. Here the input referred to background variables (Age, Sex, Family income, Educational status of father, Educational status of mother, Failure in previous classes, Study habit ,Problem with teacher, peer, subject, none. Parental motivation ,Parental fight ,Use of screen by family members ,Use of long term medication, Cups of tea &coffee per day, Finding fresh to study) and type of screen viewing.

Throughput is a process between the input and output, which enables the input to be transferred as output. In this study throughput referred to watching television and use of computer by school children.

The item included screen viewing time, level of the screen kept, type of show and programme, rest between the views etc. Based on this screening, it was divided into low and excessive viewing.

Output: Outcome is from the throughput, in this study it referred to children with good or poor sleep and their level of achievement. The achievement would be compared with their state of sleep.

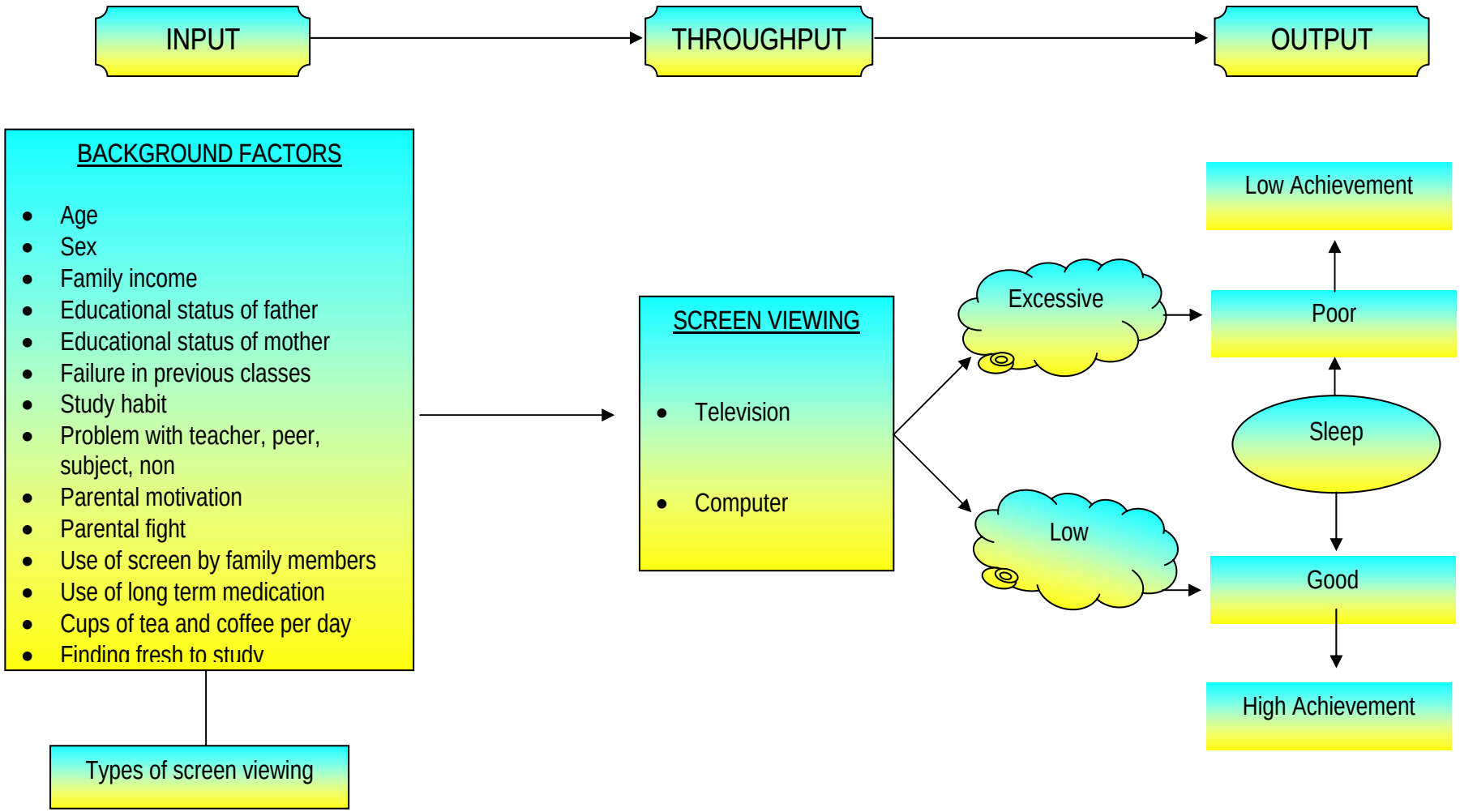


Fig. 1: CONCEPTUAL FRAME WORK BASED ON THE GENERAL SYSTEMS THEORY

CHAPTER – II

REVIEW OF LITERATURE

Review of literature is an essential component of a worth while study in any field of knowledge. It helps the investigator to gain information on what has been done previously and to gain deeper insight into the research problem. It also helps to plan and conduct the study in a systematic and scientific manner.

A review of literature is critical summary of research on a topic of interest generally prepared to put a research problem in context or to identify gaps and weakness in prior studies so as to justify a new investigation. Polit and Hungler (1995).

In this chapter, the investigator presented the available research studies and relevant literature from which the strength of the study was drawn. It was organized under the following headings:

I. Studies related to screen viewing and sleep among school children.
II. Studies related to screen viewing and academic achievement among school children.
III. Studies related to sleep and academic achievement among school children.
IV. Studies related to screen viewing and sleep and academic achievement of school children.

I. STUDIES RELATED TO SCREEN VIEWING AND SLEEP AMONG SCHOOLCHILDREN

Lis et.al., (2007) did a study on impact of media use on sleep pattern and sleep disorder among 19,299 elementary school children in 8 Chinese cities, a parent administered questionnaire and the Chinese version of children's sleep habits questionnaire was used. Results showed that a television or computer was present in the bedroom of 18.5% and 18.3% of Chinese school aged children. Television viewing > or =2 hours (day on week ends, with a prevalence of 48.8% was the predominant risk factor for all sleep disorders with the exception of the sleep duration disorder.

Bahamman A et.al., (2006), measured the sleep duration among 511(50.5%) boys and 501 (49.5%) girls in Saudi elementary school children. Parents of elementary school children were surveyed regarding their children's bedtime, rise time, sleep duration at night and daytime nap duration during week days and week ends. A questionnaire inquiring about demographical data, specific sleep problems and habits and home environment was completed by the parents. During weekdays, bedtime for the whole group was 21.3+/-1.8 hours, rise time was 5.9 +/- 0.5 hours. Total sleep time (TST) was 8.4 +/- 1.1 hours and TST, nap was 9.98 +/- 1.3 hours. Multivariate analysis revealed that TST was affected by regularity of bedtime naps and habits of watching television and playing computer games after 20 hours.

Christakis et.al., (2004) measured television and other media usage in young children,data collected through telephone survey administered to 1454 parents of children <11 years old. Results showed that daily reported child media use was as follows, television (1.45hrs;SD,1.5) videos (1.1 hrs; SD, 1.30) computer (0.54 hrs; SD ,0.96) having a television in a child's bedroom was associated with increased hours of TV[0.25 hrs(0.07,0.43)] video viewing [0.31 hrs (0.16,0.47)] and computer games[0.21 hrs (0.10,0.32)]. They concluded that

the parents whose children watched more TV were more likely to be concerned about the amount of television their child viewed.

Johnson.G et.al., (2004) measured the association between television viewing and sleep problems among 759 mothers from upstate New York and their offspring were interviewed during the early adolescence (14 years), middle adolescence (16 years) and early adulthood of the offspring (22 years). It was measured by disorganizing poverty interview and the age appropriate version of the diagnostic interview schedule for children. As a result adolescent who watched 3 or more hours of television per day during adolescence were at a significantly elevated risk for frequent sleep problem by early adulthood. Adolescent who reduced their television viewing from 1 hour or longer to less than 1 hour per day experienced a significant sleep problems.

Van den bulck (2004) studied the relationship between the presence of a television set, a gaming computer and internet connection in the room of adolescents among 2546 students from 15 schools in Flanders, Belgium. Results showed that children with a television set in their rooms went to bed significantly later week days and weekend days and got up significantly later on weekend days. Children with a gaming computer in their rooms went to bed significantly later on weekdays.

Toyran et.al., (2002) measured the effects of television viewing on physical health among 886 Turkish children. Television viewing behavior of the children, parental weight and height and physical complaints were investigated by questionnaire. According to the questionnaire, the children were found to watch television 2.1+/-1.2 hrs/day during the week days,3.4 +/-2.1 hr/ day at the week end and 2.5 +/- 1.3 hr/day .Generally children were also grouped according to the amount of the time they watch television. Group1 (n=298) children watched television less than 2 hr / day, group2 (n=323) watched 2-4 hr /day and group 3 (n=68)

more than 4 hr /day . Head ache, back pain eye symptoms and sleep problems were found to be more often among children who watched television longer ($p<0.05$)

Tazawal et.al., (2001) measured the association of physical signs and excessive television game playing and sleep deprivation among 1143 school children, aged between 6 and 11 yrs old and their parents were included in the study . Questionnaire were sent to guardians asking the number of hours that their children watched TV, TV game and slept. All children were examined to check black rings in the skin under the eye (BR) , muscle stiffness in the shoulder (MS) and displacement of the scapula(DS) by inspection and palpation. These signs BR, MS, DS were present in 165 (14.4%), 229(20%) and 72(6.2%) children. Boys spent more time on TV game playing than girls(1.1+/- 0.7 hr/day vs 0.+/- 0.6/day ,$p<0.0001$) respectively. The TV game playing time correlated with two signs BR ($p=0.0143$) MS ($p=0.0048$), furthermore sleep deprivation related to three signs BR ($p=0.0078$), MS($p<0.0001$) and DS ($P=0.0290$).

II. STUDIES RELATED TO SCREEN VIEWING AND ACADEMIC ACHIEVEMENT AMONG SCHOOL CHILDREN

Hancox et.al., (2005) conducted a prospective birth cohort study among approximately 1000 unselected individuals born between April 1,1972 and 1973 in Dunedin, New Zealand. The main outcome was measured by 26 years of age and the result was the mean time spent on watching television during childhood and adolescence. It was significantly associated with leaving schools without qualifications and negative associated with attaining a university degree. Risk ratio for each hour of TV viewing per weeknight ,adjusted IQ and sex were 1.43 (95% CI, 1.24-1.65) and 0.75,(95% CI, 0.67-0.85) respectively 9 both($p<0.001$). TV viewing during childhood (5-11 years) and adolescent (13-15 years) had adverse association with later educational achievement.

Borzekowski and Robinson (2005) studied the household media environment, media use and academic achievement among third grade students. Data were collected through classroom surveys and telephone interviews from an ethnically diverse sample of third grade students and their parents from 6 northern California public elementary schools. Stanford achievement test was used. It was found that having a bedroom television set was significantly and negatively associated with students test scores, while home computer access and use were positively associated with scores.

Ozmen et.al., (2002) measured the relationship between TV viewing and behaviour among students in grades 2 and 3 and their parents. A questionnaire on children's time spent watching television and engaging in other daily activities and the child behavior check list (CBCL) were sent to the parents of 888 second and third grade students. Results of the questionnaire reported that the overall mean +/-SD daily television viewing time was 2.5+/- 1.3 hours. Overall television viewing time had a negative correlation with social and school achievement $r=-0.17$, $p<0.001$and $r=0.11$, $p=0.03$, respectively. Stepwise logistic regression analysis revealed that the only significant variables associated with a risk watching television for more than 2 hours were age, gender ,social subscale, and attention problem subscale scores of CBCL.

Sharif Iman et.al., (2001) conducted a population based cross-sectional survey of 4508 middle school students (grades5-8) in the North Eastern United States .In multivariate analysis, the Odds of poorer school performance increased with increasing weekday television screen time and cable movie channel availability and decreased with parental restriction of television content restriction.

III. STUDIES RELATED TO SLEEP AND ACADEMIC ACHIEVEMENT OF SCHOOL CHILDREN

Keller et.al., (2008) investigated the amount and quality of children's sleep as a moderator of relation between attachment to parents and academic functioning. Data were from a sample of 166 third grades in the southeastern USA. Standard assessments of academic achievement was obtained from schools. School children completed questionnaire measures of subjective sleep problems and their sleep was assessed objectively via act graphs worn for seven consecutive nights. Findings suggested that better sleep ameliorates the risk for academic performance difficulties associated with insecure attachments to parents and function as a protective factor in this context.

Bercedo et.al., (2001) done a transversal survey which was carried out in the parents of 796 children aged 2-13 yrs old with the help of 47 primary pediatricians . The chi-square, Mann Whitney and Keuskal – Wallis tests as well as multiple regression analysis were used for the statistical analysis. Results showed that children aged 2-5 yrs old watched TV for 9 hrs / wk, those aged 6-9 yrs watched 12.5 hrs week and those aged 10-13 yrs watched 14.6 hrs /wk. the presence of TV ,computer or video games in the child's room increased with age and was 15%,9% and 10% respectively. Girls aged 10-13 years were more likely to have computers in their rooms (20% versus 9% of boys of the same age), while boys aged 10-13 were more likely to have videogames than girls (22% versus 11%respectively). Children with lower school performance watched more television (2.85 hrs/week $p<0.001$)

IV. STUDIES RELATED TO SCREEN VIEWING AND SLEEP AND ACADEMIC ACHIEVEMENT OF SCHOOL CHILDREN

Heins.E.et.al., (2007) measured the use of cell phone among 1933 children from 34 schools. Data were collected by using self administered questionnaire. In overall results 28% of the children reported going to bed after 9 pm on week nights, 16% reported watching television more than three hours daily and 11% played computers or video games more than three hours daily and playing computer games for more than three hours daily. He concluded that sufficient sleep and less television and computer leisure time should be assertively emphasized to parents and caregivers of primary school students in order to prevent the negative consequences of lack of sleep and diminished school performance.

Schierl, et.al., (2007) measured the effects of singular excessive television and computer game consumption on sleep pattern and memory performance among eleven school aged children. Children were exposed to voluntary excessive television and computer game consumption. In the subsequent night, polysomnographic measurements were conducted to measure sleep- architecture and sleep- continuity parameters. In addition , a visual and verbal memory test was conducted before media stimulation and after the subsequent sleeping period to determine visuospatial and verbal memory performance. The results suggested that television and computer game exposure affect children's sleep and deteriorate verbal cognitive performance.

CHAPTER – III

METHODOLOGY

Methodology is a systematic approach to techniques or procedure related to the steps, refine procedure for obtaining, organizing or analyzing data in a research investigation. This chapter deals with research design, setting ,population, sample and sample size, sampling technique, sample selection criteria, description of the tool, scoring, validity of the tool, reliability of the tool, pilot study ,data collection procedure, plan of data analysis ,ethical consideration.

This study was conducted to compare and correlate the screen viewing and sleep among low and high achievers of the school children.

RESEARCH DESIGN

According to Polit and Hungler (2004), a descriptive research is not concerned with the cause and effect relationship among variables. Its purpose is to observe, describe and document aspects of a situation. Co-relational study examines the relationship between two or more variables in the same group of samples. It does not test the cause and effect relationship. Comparative design means, comparing and contrasting two or more groups on one or more variables, often at a single point of time.

In this study, the investigator focused to correlate screen viewing and sleep between the low and high achievers. The research design adopted for the present study was a comparative, co relational survey.

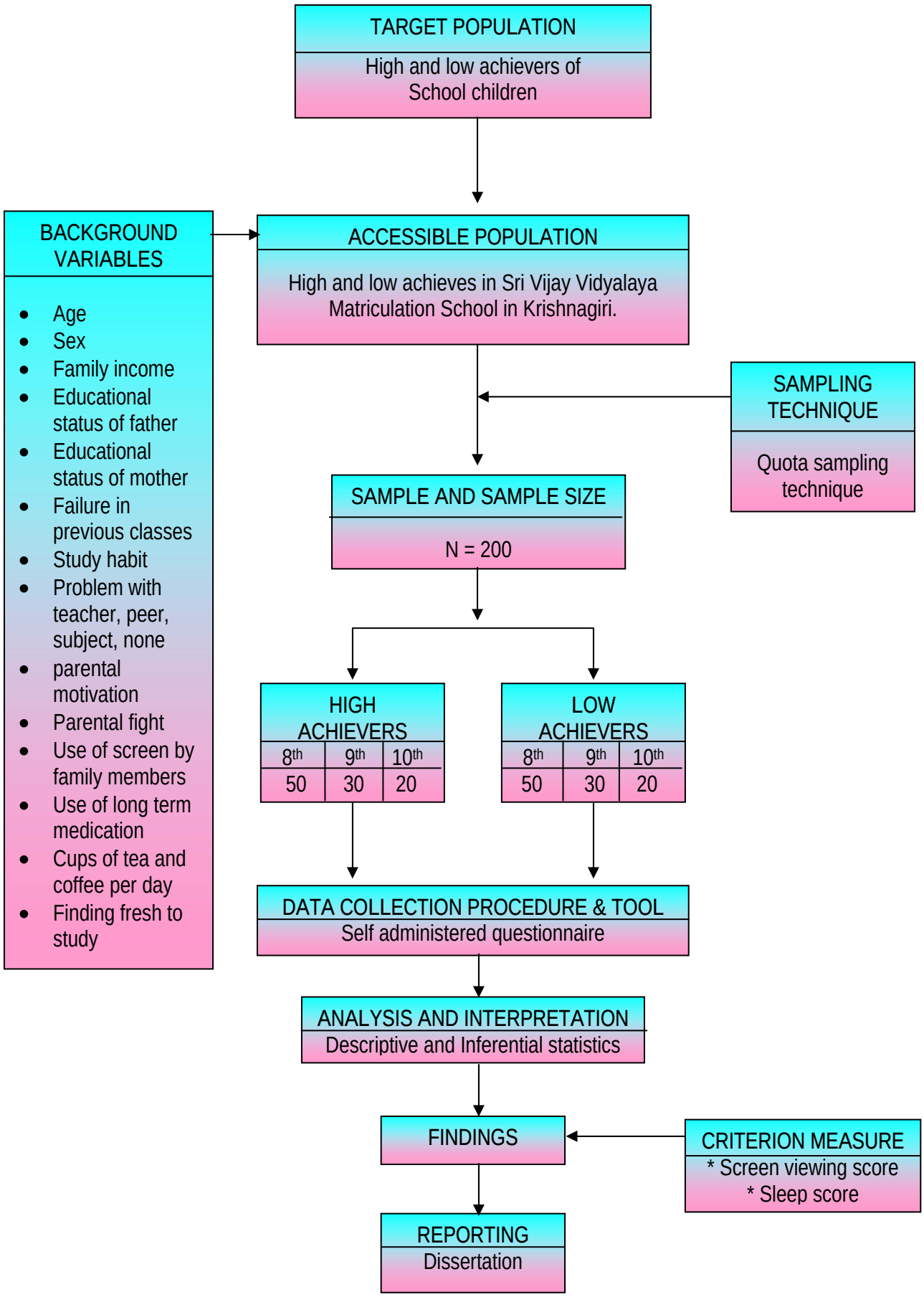


Fig. 2: SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

VARIABLES

Dependent variables : Dependent variable in this study were screen viewing and sleep.

Associate variables : Age, sex, family income, educational status of father, educational status of mother, failure in previous classes, study habit, problem with teacher, peer, subject and none, parental motivation, parental fight, use of screen by family members, use of long term medication, cups of tea & coffee per day, finding fresh to study.

SETTING

Research settings are the specific places where the data collection takes place. The setting was selected based on acquaintance of the investigator with the community, feasibility of conducting the study, availability of subjects, cooperation from authorities and proximity of setting to the investigator.

The setting for the study was Sri Vijay Vidyalaya Matriculation School in Krishnagiri district.

POPULATION

Population consists of the entire sets of individual events, place or objects that possess the specific characteristics or attributes being studied.

Population may be of two types, target population and accessible population.

Target population is the aggregate of cases about whom the investigator would like to make generalization. The target population for the study was the low and high achievers of the school children

Accessible population is the aggregate of case that confine to the designed criteria and which is accessible to the investigator as a part of subject for conducting the study. The accessible population selected for this study was low and high achievers of a Sri Vijay Vidyala Matriculation School in Krishnagiri studying 8th, 9th and 10th standard.

SAMPLE AND SAMPLE SIZE

A sample is a portion of the population that has been selected to represent the study population. The samples for the present study were the low and high achievers in Sri Vijay Vidyalaya Matriculation School in Krishnagiri.

Sample size is the number of elements selected from the population. In this study, the sample size was arbitrarily decided to be 200 school children inclusive of 100 high achievers and 100 low achievers.

SAMPLING TECHNIQUE

Sampling is the process of selecting a portion of the population to represent the entire population. In this study quota sampling technique was used.

Quota	Low achievers			High achievers		
Standard	8	9	10	8	9	10
Number	50	30	20	50	30	20

SAMPLING CRITERIA

Selection of the sample was done on both inclusive and exclusive criteria:

Inclusion criteria refer to school children

- Who were studying 8th, 9th, 10th standard.
- Who were both male and female school children.
- Who could respond to Tamil questionnaire.
- In top 10 ranks are high achievers and children in last 10 ranks were low achievers.
- Who were willing to participate in the study.

Exclusion criteria refer to school children

- Who were absent during data collection.
- Who were not exposed to television and computer.
- Who were physically sick at the time of data collection.
- Who were staying in hostels.

DEVELOPMENT OF THE TOOL

According to Talbot (1995), tool is an instrument that measures the variables of interest of the study accurately, precisely and sensitively. The tool used for the data collection was semi structured questionnaire. It was prepared after a careful and detailed review of literature and discussion with experts.

DESCRIPTION OF THE TOOL

The tool used for data collection was a semi structured questionnaire developed by the investigator, comprised of three parts.

Part I: Background factors- comprised of 14 items seeking general information about the school children.

Part II: Information on screen viewing- consisted of 19 items which sought information regarding television watching and using computers. The items were distributed as follows.

1. Television:1-10
2. Computer :11-19

Part III : Sleep - consisted of 11 items which sought information regarding sleep.

SCORING

Screen viewing was measured in terms of screen viewing scores. Responses were graded according to the usage of screen. The maximum score was 48.

Sleep was measured in terms of sleep scores. Responses were graded according to the quality of sleep. The maximum sleep score was 30.

VALIDITY OF THE TOOL

Eight experts including 1 medical, 5 nursing experts, 1 epidemiologist and 1 psychologist validated the tool for its content. The experts were requested to check for the relevance, sequence and clarity of the tool, modification was done according to expert's opinion and the final tool was developed.

RELIABILITY

The tool was administered to 10 samples. The interval between the two tests was 6 days. The Reliability coefficient was calculated by Karl Pearson's method and r=0.92 was high. Therefore the questionnaire was found to be reliable.

PILOT STUDY

The pilot study is a preliminary research conducted to test the elements of design before the commencement of an actual full-scale study. It is a small version or trial run of the major study.

The pilot study was conducted in school at Royal Matriculation School, Kaveripatinam. For the pilot study, the investigator conveniently selected 30 students from Royal Matriculation School. Formal approval was obtained from the principal. The children were selected based on their ranks. The tool was administered.

The feasibility of the study in terms of time, availability of samples, cooperation of students, clarity of the tool and appropriateness of the setting were established. The average time taken was 20 minutes.

DATA COLLECTION PROCEDURE

The present study was conducted in Sri Vijay Vidyala Matriculation School in Krishnagiri district. Formal approval was obtained from the principal .The children were selected from 8^{th} ,9^{th} ,10^{th} classes based on their ranks. Using quota sampling the children were divided into two groups as low achiever (last 10 ranks) and high achievers (first 10 ranks).

The purpose of the study was explained. Informed oral consent was taken .Self administered questionnaire was administered. Total time taken for answering the question was 20 minutes. The tool was edited for computation.

PLAN FOR DATA ANALYSIS

1. Data on background factors were analyzed using frequency percentage distribution.
2. Mean, standard deviation, r-value were used to analyse screen viewing and sleep among low and high achievers.
3. Association between selected factors and sleep and screen viewing were analyzed using linear regression.

ETHICAL CONSIDERATION

For the present study, the investigator took into consideration the ethical values. The study was accepted by the research committee. Prior permission was obtained from the school principal of Sri Vijay Vidyalaya Matriculation School in Krishnagiri.. Explanation regarding the purpose of the study was done and informed consent was obtained orally from the study participants. Thus ethical consideration was ensured in the study.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

The analysis and interpretation of data of this study was done based on data collected from the school children by semi structured questionnaire. The results were computed using descriptive and inferential statistics. The data were entered into the excel sheet and analyzed using SPSS 10 version. A probability of less than 0.05 was considered to be statistically significant.

The objectives of the study were,

1. To find the association between screen viewing and sleep among low and high achievers of school children.
2. To test the association between the background factors and sleep among low and high achievers.
3. To test the association between the background factors and screen viewing among low and high achievers.

The data analyzed were presented as follows:

Section – I : Data on background factors of low and high achievers of school children.

Section – II : Association between screen viewing and sleep among low and high achievers.

Section – III : Data on association between sleep and selected factors such as sex, failure in previous classes, study habit, parental motivation to study, parents fight among themselves, use of screen by family members, find fresh to study among low and high achievers of school children.

Section – IV : Data on association between screen viewing and selected factors such as sex, failure in previous classes, study habit, parental motivation to study, parents fight among themselves, use of screen by family members, find fresh to study among low and high achievers of school children.

SECTION – I : DATA ON BACKGROUND FACTORS OF LOW AND HIGH ACHIEVERS OF SCHOOL CHILDREN.

TABLE – 1

Frequency and percentage distribution of the school children regarding their background factors

Background Factors	*Low Achievers n=100*		*High Achievers n=100*		*χ^2 Value*
	Freq.	*%*	*Freq.*	*%*	
Sex of the child					$\chi^2 = 3.380$
a) Male	57	57%	44	44%	(P = 0.066)
b) Female	43	43%	56	56%	(NS)
Family income					$\chi^2 = 1.363$
a) Above poverty line	80	80%	73	73%	(P = 0.243)
b) Below poverty line	20	20%	27	27%	(NS)
Failure in previous classes					$\chi^2 = 11.033$
a) Yes	24	24%	7	7%	(P = 0.001) (S)
b) No	76	76%	93	93%	
Parental motivation to study					
a) Always	47	47%	36	36%	$\chi^2 = 4.221$
b) Sometimes	45	45%	48	48%	(P = 0.121)
c) Never	8	8%	16	16%	(NS)
Parental fight among themselves					
a) Always	3	3%	1	1%	$\chi^2 = 1.040$
b) Sometimes	48	48%	48	48%	(P = 0.595)
c) Never	49	49%	51	51%	(NS)

Background Factors	*Low Achievers n=100*		*High Achievers n=100*		*χ^2 Value*
	Freq.	*%*	*Freq.*	*%*	
Use of screen by family members in late night					$\chi^2 = 416$
a) Yes	28	28%	24	24%	(P = 0.519)
b) No	72	72%	76	76%	(NS)
Use of long term medications					
c) Yes	10	10%	5	5%	$\chi^2 = 1.802$
d) No	90	90%	95	95%	(P = 0.179)
					(NS)

NS = Not Significant S = Significant

Table 1 reveals the background factors of school children such as sex, family income, failure in previous classes, parental motivation to study, parents fight among themselves, use of screen by family members, long term medications.

Regarding sex, majority of school children 57 (57%) were male and least 43(43%) were female among low achievers and majority of school children 56(56%) were female and least 44(44%) were male among high achievers. There was no significant association regarding sex among low achievers and high achievers $\chi^2 = 3.384$ (P = 0.066).

Regarding family income, majority of school children 80 (80%) were above poverty line, least 20 (20%) below poverty line among low achievers and majority of school children 73 (73%) were above poverty line and least 27 (27%) were below poverty line among high achievers. There was no significant association regarding family income among low achievers and high achievers $\chi^2 = 1.363$ (P = 0.243).

Regarding failure in previous classes, majority of the school children 76 (76%) did not fail in previous classes, least 24 (24%) of low achievers failed in previous classes and majority of school children 93 (93%) did not fail in previous classes and least 7 (7%) of high achievers failed in previous classes. There was significant association regarding failure in previous classes among low achievers and high achievers $\chi^2 = 11.003$ (P = 0.001).

Regarding parental motivation to study, majority of school children 47 (47%) were motivated by parents and least 8 (8%) were never motivated by parents among low achievers and majority of school children 48 (48%) were always motivated by parents and least 16 (16%) was never motivated by parents among high achiever. There was no significant association regarding parental motivation to study among low achievers and high achievers $\chi^2 = 4.221$ (P = 0.121).

Regarding parental fight among themselves, majority of school children 49 (49%) had no parental fight and least 3 (3%) had parental fight among low achievers and majority of school children 51 (51%) had no parental fight and 1(1%) had always parental fight among high achievers. There was no significant association regarding parental fight among low achievers and high achievers $\chi^2 = 1.040$ (P = 0.595).

Regarding use of screen by family members in late night, majority of school children 72 (72%) family members never used screen at late night, least 28 (28%) family members used screen at late night among low achievers and majority of school children 76 (76%) family members never used screen at late night and least 24 (24%) family members used screen at late night among high achievers. There was no significant association regarding the use of screen by family members at late night among low achievers and high achievers $\chi^2 = 0.416$ (P = 0.519).

Regarding the use of long term medication, majority of school children 90 (90%) were not used to long term medication ,least 10 (10%) used long term medication among low achievers and majority of school children 95 (95%) were not used to long term medications, least 5 (5%) were used to long term medication among high achievers. There was no significant association regarding use of long term medication among low achievers and high achievers $\chi^2 = 1.802$ (P = 0.179).

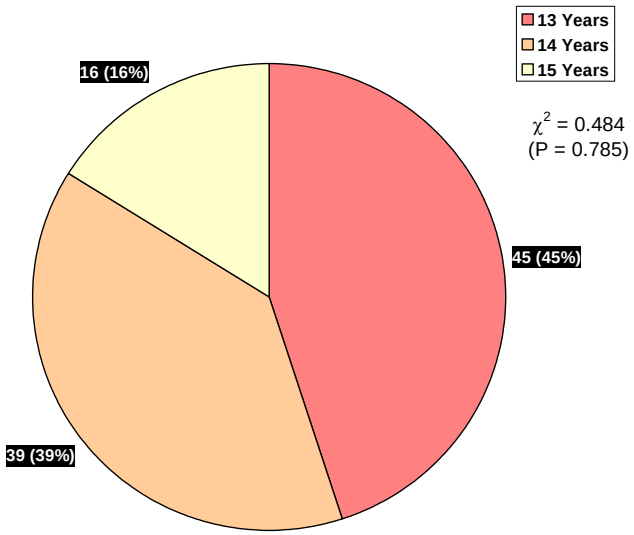
It was inferred that majority of school children were male, above poverty line, did not fail in previous classes, always had parental motivation to study, had no parental fight, did not use of screen by family members in late night and did not use long term medication among low achievers

It was inferred that majority of school children were female , above poverty line, did not fail in previous classes , sometimes had parental motivation to study , had no parental fight, the screen was not used by family members and did not use to long term medication among high achievers.

Figure 3, shows frequency and percentage distribution regarding age. Majority of school children 45 (45%) were in the age group of 13 years, least 16 (16%) were in the age group of 15 years among low achievers and majority of school children 46 (46%) were in the age of 13 years and least 19 (19%) were in the age of 15 years among high achievers. There was no significant association regarding age among low achievers and high achievers $\chi 2 = 0.484$ ($P = 0.785$).

It was inferred that majority of school children were in the age group of 13 years among low achievers and high achievers.

LOW ACHIEVERS



HIGH ACHIEVERS

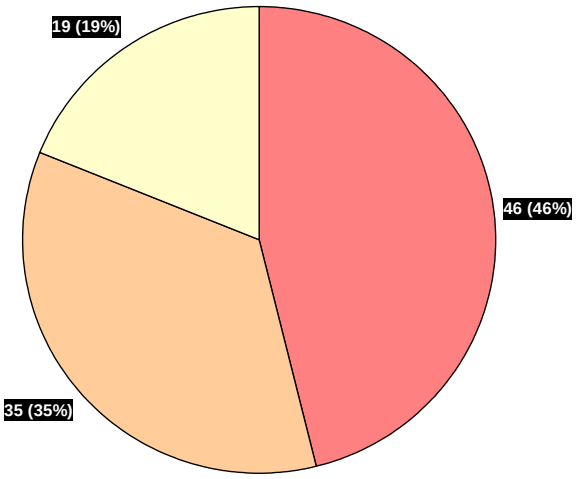
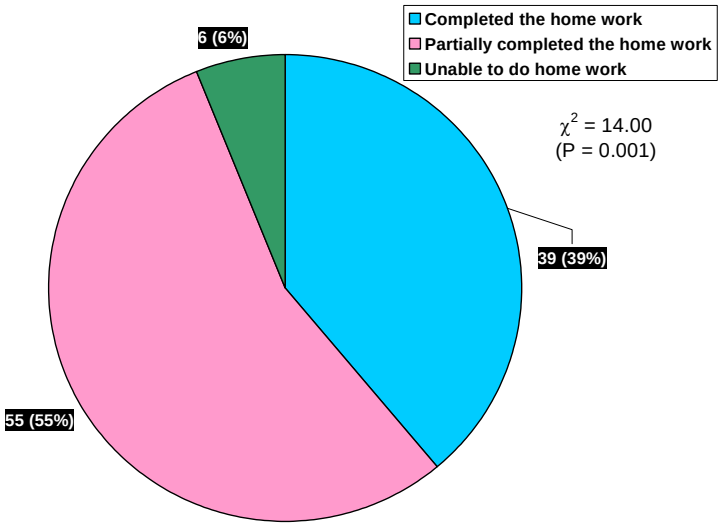


Fig. 3: Frequency and percentage distribution regarding age.

Figure 4, shows frequency and percentage distribution regarding study habit. Majority of school children 55 (55%) were partially completed their home work and least 6 (6%) were not able to do their home work among low achievers and majority of school children 65 (65%) were completed their work regularly, least 2 (2%) were not able to do their home work among high achievers. There was a significant association regarding study habit among low achievers and high achievers $\chi^2 = 14.00$ (P = 0.001).

It was inferred that majority of school children partially completed their homework among low achievers and majority of school children completed their work regularly among high achievers.

LOW ACHIEVERS



HIGH ACHIEVERS

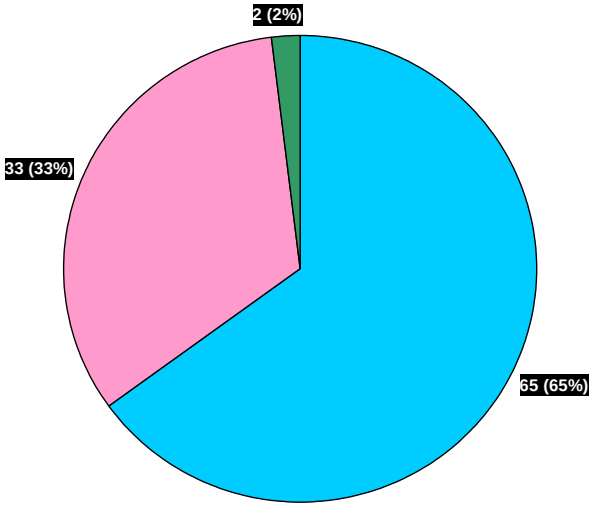
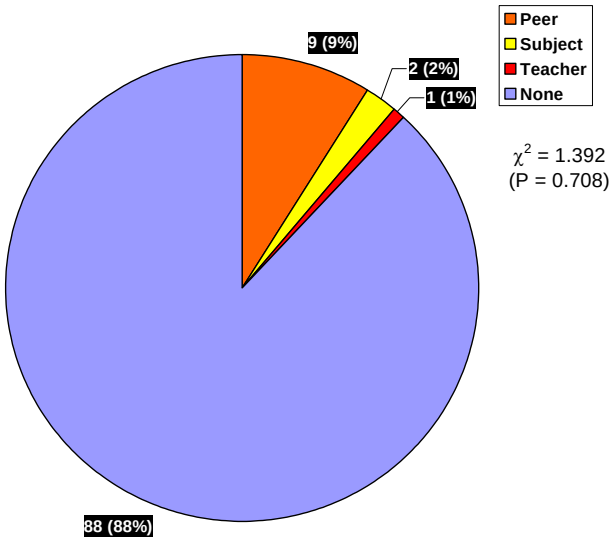


Fig. 4: Frequency and percentage distribution regarding study habit

Figure 5, shows frequency and percentage distribution regarding problems with teacher, subject, peer and none. Majority of school children 88 (88%) had no problem with teacher, subject and peer, least 1 (1%) had problem with teacher among low achievers and majority of school children 89 (89%) had no problem with teacher, subject and peer, least 1 (1%) had problem with subject among high achievers. There was no significant association regarding problems with teacher, subject and peer among low achievers and high achievers $\chi^2 = 1.392$ (P = 0.708).

It was inferred that majority of school children had no problem with the teacher, subject and peer among low achievers and majority of school children had no problem with the teacher, subject and peer among high achievers.

LOW ACHIEVERS



HIGH ACHIEVERS

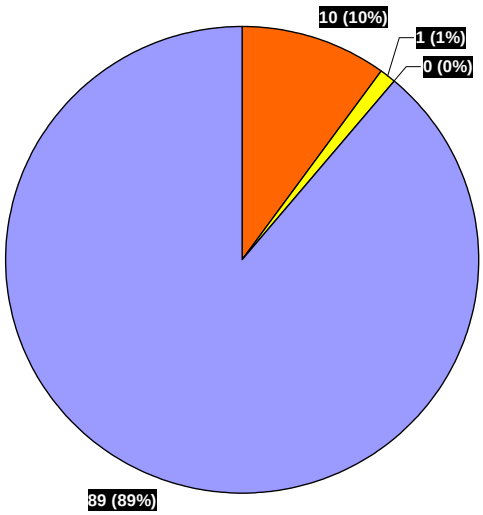


Fig. 5: Frequency and percentage distribution regarding problems with teacher, subject, peer and none

Figure 6, shows frequency and percentage distribution regarding educational status of father. Majority of school children 96 (96%) were literate and least 4 (4%) were illiterate among low achievers and majority of school children 99 (99%) were literate and least 1 (1%) was illiterate among high achievers. There was no significant association regarding educational status of father among low achievers and high achievers $\chi^2 = 1.846$ (P = 0.174).

It was inferred that majority of fathers of school children were literate among low achievers and majority of fathers of school children were literate among high achievers.

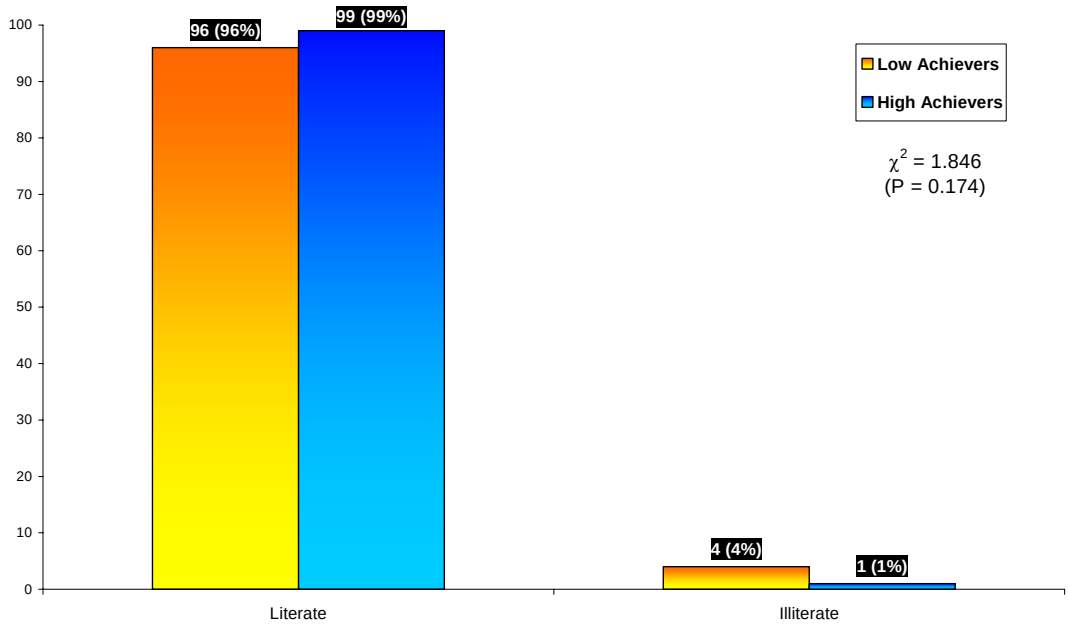


Fig. 6: Frequency and percentage distribution regarding educational status of fathers.

Figure 7, shows frequency and percentage distribution regarding educational status of mother. Majority of school children 95 (95%) were literate and least 5 (5%) were illiterate among low achievers and majority 93 (93%) were literate, least 7 (7%) were illiterate among high achievers. There was no significant association regarding educational status of mother among low achievers and high achievers $\chi^2 = 0.355$ (P = 0.552).

It was inferred that majority of mothers of school children were literate among low achievers and majority of mothers of school children were literate among high achievers

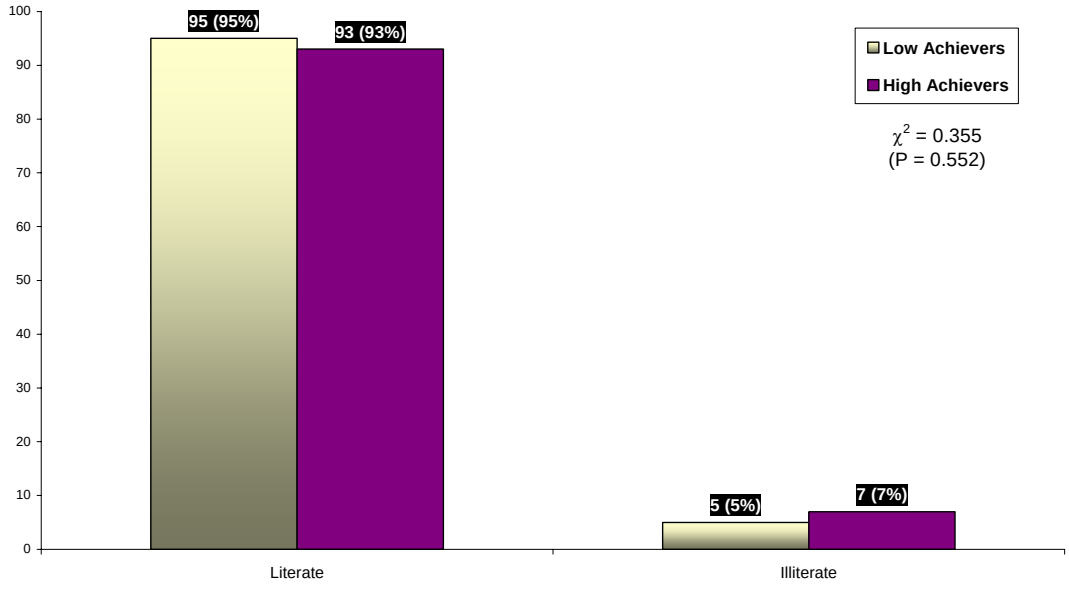


Fig.7: Frequency and percentage distribution regarding educational status of mothers.

Figure 8, shows frequency and percentage distribution regarding intake of coffee / tea by students. Majority of school children 38 (38%) had the habit of taking tea /coffee, least 3 (3%) had the habit of taking tea /coffee more than 2 cups among low achievers and majority of school children 40 (40%) had the habit of taking 1 cup of coffee / tea and least 4 (4%) had no habit of taking tea/coffee among high achievers. There was no significant association regarding intake of tea/coffee among low achievers and high achievers $\chi^2 = 0.589$ (P = 0.899).

It was inferred that majority of school children had the habit of taking tea/ coffee among low achievers and majority of school children had the habit of taking tea / coffee among high achievers.

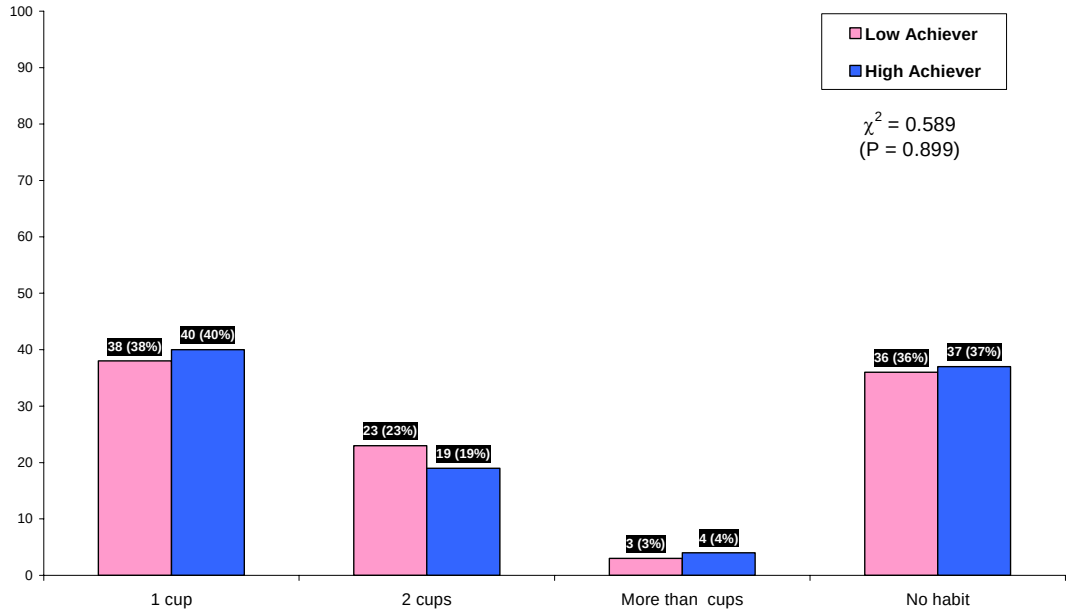


Fig. 8: Frequency and percentage distribution regarding the Intake of tea / coffee per day.

Figure 9, shows frequency and percentage distribution regarding feeling fresh to study. Majority of school children 44 (44%) studied early in the morning and least 21 (21%) studied at night among low achievers and majority of school children 63 (63%) studied early in morning and least 14 (14%) studied at night among high achievers. There was no significant association regarding feeling fresh to study among low achievers and high achievers $\chi^2 = 7.257$ (P = 0.027).

It was inferred that majority of school children studied early in the morning among low achievers and majority of school children studied early in the morning among high achievers.

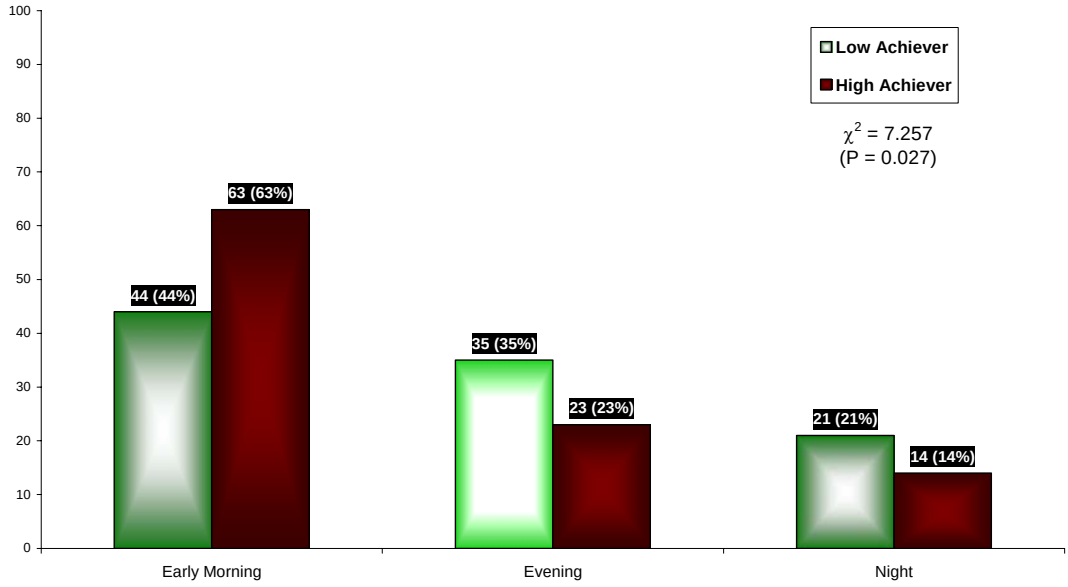


Fig. 9: Frequency and percentage distribution regarding feeling fresh to study.

SECTION – II: ASSOCIATION BETWEEN SCREEN VIEWING AND SLEEP AMONG LOW AND HIGH ACHIEVERS

For the purpose of the study, the following null hypotheses were stated:

H_{01} : There will be no significant association between screen viewing and sleep among low achievers.

H_{02} : There will be no significant association between screen viewing and sleep among high achievers.

H_{03} : There will be no significant difference in sleep among school children between low achievers and high achievers

H_{04} : There will be no significant difference in screen viewing among school children between low achievers and high achievers

TABLE – 2

Mean, SD and "r" value regarding screen viewing and sleep among low and high achievers

School Children	*Screen Viewing*		*Sleep*		*"r" Value* *P value*
	Mean	*SD*	*Mean*	*SD*	
Low achievers n=100	30.57	3.15	24.33	2.79	r = -0.219 (P = 0.028) S
High achievers n=100	32.40	3.24	23.41	3.00	r = -0.265 (P = 0.008) S

S - Significant

Table 2, reveals the correlation between screen viewing and sleep among low and high achiever.

There was significant low negative correlation between screen viewing and sleep r = -0.219 (P=0.028) among low achievers. Therefore, the null hypothesis H_{01} was rejected.

There was significant low negative correlation between screen viewing and sleep r = -0.265 (p=0.008) among high achievers. Therefore, the null hypothesis H_{02} was rejected

It was inferred that the screen viewing and sleep was negatively correlated. As the screen viewing increased, the sleep of the school children decreased.

TABLE – 3

Mean, SD, mean difference & "t" value regarding sleep among low and high achievers

School Children	*Maximum score*	*Mean*	*SD*	*Mean Difference*	*"t" Value P Value*
Low achievers n= 100	30	23.41	3.00	-0.92	-2.247 (P = 0.026) S
High achievers n= 100	30	24.33	2.79		

Table 3, reveals mean, SD, range & "t" value regarding sleep among low and high achiever among school children.

The mean sleep M= 24.33 (SD = 2.79) of high achievers was more than the low achiever mean M =23.41 (SD = 3.00). The obtained mean difference was -0.92 and "t" value t = -2.247 (P = 0.026) was significant. Therefore the null hypothesis H_{03} was rejected.

It was inferred that, among school children high achiever's sleep was significantly higher than the low achiever's sleep.

TABLE – 4

Mean, SD, mean difference & "t" value regarding screen viewing among low and high achievers

School Children	*Maximum score*	*Mean*	*SD*	*Mean Difference*	*"t" Value P Value*
Low achievers n= 100	48	32.40	3.24	1.83	t = 4.051 (P <0.001) S
High achievers n= 100	48	30.57	3.15		

S - Significant

Table 4, reveals mean, SD, range & "t" value regarding screen viewing among low and high achiever among school children.

The screen viewing mean M = 32.40 (SD = 3.24) of low achiever was more than high achiever's screen viewing mean M= 30.57 (SD = 3.15). The obtained mean difference was 1.83 and 't" value t = 4.051 (P < 0.001) was significant. Therefore the null hypothesis H_{04} was rejected.

It was inferred that low achiever's screen viewing was significantly higher than high achiever's screen viewing among school children.

SECTION – III: DATA ON SLEEP AND SELECTED BACKGROUND FACTORS OF LOW AND HIGH ACHIEVERS

For the purpose of the study, the following hypothesis was stated.

H_{05} : There will be no significant association between sleep among low and high achievers.

TABLE – 5

Linear regression regarding association between sleep and background factors

Background Factors	*Sleep*					
	Low achievers			*High achievers*		
	β	*"t" Value*	*Sig.*	*β*	*"t" Value*	*Sig.*
Sex	0.078	0.772	0.442 (NS)	0.008	0.079	0.938 (NS)
Failure in previous classes	0.016	0.162	0.872 (NS)	-0.006	-0.058	0.954 (NS)
Study habit	-0.402	-3.529	0.001 (S)	-0.298	-3.083	0.003 (S)
Parental motivation	0.078	0.744	0.459 (NS)	0.099	1.027	0.307 (NS)
Parents fight among themselves	0.030	0.287	0.775 (NS)	0.166	1.716	0.090 (NS)
Use of screen by family members at late night	0.059	0.565	0.573 (NS)	0.317	3.282	0.002 (S)
Find fresh to study	-0.052	-0.520	0.604 (NS)	-0.121	-1.165	0.247 (NS)

Table 5, reveals linear regression on selected factors and sleep among low and high achievers.

Among low achievers of school children, there was significant association between sleep and study habit, t = -3.5 (p=.001);

However there was no association between sleep and other background factors such as sex t = 0.772 (p=0.442); , failure in previous classes t = 0.162 (p=0.872); parental motivation to study t = 0.744 (p=0.459);parents fight among themselves t = 0.287 (p=0.775);use of screen by family members in late night t = 0.565 (p=0.573); find fresh to study t = -0.520 (p=0.604) were not significantly associated with sleep among low achievers.

Among high achievers of school children, there was significant association between sleep and study habit, t= -3.08 (p=.003), use of screen by family members at late night t= 3.28 (p=0.002).

However there was no association between sleep and other background factors such as sex t = 0.079 (p=0.938); failure in previous classes t = -0.058 (p=0.954); parental motivation to study t = 1.027 (p=0.307); parents fight among themselves t = 1.716 (p=0.090), find fresh to study t = -1.165 (p=0.247) were not significant associated with sleep among low achievers.

It was inferred that study habit was independently associated with the sleep of school children among low achievers and study habit and use of screen by family members were independently associated with the sleep of school children among high achievers.

SECTION – IV: DATA ON SCREEN VIEWING AND SELECTED BACKGROUND FACTORS OF LOW AND HIGH ACHIEVERS

For the purpose of the study, the following hypothesis was stated.

H_{06} : There will be no significant association between screen viewing among low and high achievers.

TABLE – 6

Linear regressing regarding association between screen viewing and background factors

Background Factors	*Screen viewing*					
	Low achievers.			*High achievers.*		
	β	*"t" Value*	*Sig.*	*β*	*"t" Value*	*Sig.*
Sex	-0.056	-0.524	0.602 (NS)	-0.265	-2.538	0.013 (S)
Failure in previous classes	0.008	0.075	0.941 (NS)	-0.010	-0.095	0.924 (NS)
Study habit	0.043	0.354	0.724 (NS)	0.063	0.608	0.545 (NS)
Parental motivation	-0.020	-0.180	0.858 (NS)	-0.052	-0.507	0.614 (NS)
Parents fight among themselves	-0.263	-2.386	0.019 (S)	-0.195	-1.879	0.064 (NS)
Use of screen by family members at late night	-0.154	-1.384	0.170 (NS)	-0.065	-0.631	0.530 (NS)
Find fresh to study	0.109	1.038	0.302 (NS)	-0.036	-0.324	0.747 (NS)

Table 6, reveals linear regression on selected factors and screen viewing among low and high achievers.

Among low achievers of school children, there was significant association between screen viewing and parents fight among themselves, t = -2.386 (p=0.019);

However there was no association between screen viewing and other background factors such as sex t = -0.524 (p=0.602); failure in previous classes t = 0.075 (p=0.941); study habit t = 0.354 (p=0.724) ;parental motivation to study t = -0.180 (p=0.858); use of screen by family members in late night t = -1.384 (p=-0.170); find fresh to study t = 1.038 (p=0.302) .

Among high achievers of school children, there was significant association between screen viewing and sex t=-2.538 (p=0.013).

However there was no association between screen viewing and other background factors such as failure in previous classes t = -0.095 (p=0.924); study habit t=0.608(0.545) parental motivation to study t = -0.507(p=0.614); parents fight among themselves t = -1.879 (p=0.064); use of screen by family members in late night t = -0.631 (p=0.530); find fresh to study t = -0.324(p=0.747).

It was inferred that parents fight among themselves was independently associated with the screen viewing of school children among low achievers and sex was independently associated with the screen viewing of school children among high achievers.

CHAPTER – V

SUMMARY, FINDINGS, DISCUSSION, IMPLICATION, RECOMMENDATIONS AND CONCLUSION

The essence of any research project lies in reporting the findings. The chapter report the summary, findings, recommendations, limitations of the study, suggestions for further studies and nursing implications.

SUMMARY

The primary aim of the study was to assess the relationship between screen viewing and sleep among low and high achievers of school children

The objectives of the study were,

1. To find the association between screen viewing and sleep among low and high achievers of school children.
2. To test the association between the background factors and sleep among low and high achievers of school children.
3. To test the association between the background factors and screen viewing among low and high achievers of school children.

The hypotheses of the study were,

H_1 : There will be a significant association between screen viewing and sleep among high achievers of school children.

H_2 : There will be a significant association between screen viewing and sleep among low achievers of school children.

H_3 : There will be a significant association between the background factors and sleep among low and highachievers

H_4 : There will be a significant association between the background factors and screen viewing among low and highachievers.

The review of literature on related studies helped the investigator to design conceptual framework, methodology and to develop the tool. The literature review done for the present study were presented under the following headings: 1.Studies related to screen viewing and sleep among school children, 2.Studies related to screen viewing and academic achievement among school children 3.Studies related to sleep and academic achievement among of school children 4.Studies related to screen viewing and sleep and academic achievement of school children.

The investigator developed a conceptual framework, based on system model. The research approach used was a comparative, corelational design. The dependent variable in this study were sleep and screen viewing and associate variables in this study were age, sex, family income, educational status of father, educational status of mother, failure in previous classes, study habit ,problem with teachers, subject and peer , parental motivation ,parental fight ,use of screen by family members ,use of long term medication, cups of tea &coffee per day, finding fresh to study.

A Semi structured questionnaire was used to collect information regarding screen viewing and sleep among low and high achievers.8 experts validated the tool. The reliability of the tool was done by test re-test method. The reliability coefficient r=0.92 was high.

Pilot study was conducted among 30 school children from 8th, 9th and 10th standard of Royal Matriculation School, Kaveripatinam and the tool was found to be feasible.

The sample size in the study was 200 school children inclusive of 100 low achievers and 100 high achievers. The sampling technique used was quota sampling.

The main study was conducted in Krishnagiri, Tamilnadu in Sri Vijay Vidyalaya Matriculation School. Samples were selected based on inclusion and exclusion criteria. A total of 200 students were recruited in the study using quota sampling. Data were gathered by semi structured questionnaire and analyzed by descriptive and inferential statistical method and interpretation was made on the basis of the objectives of the study.

CHARACTERISTICS OF THE STUDY SAMPLE

Majority of school children were in the age group of 13 years45 (45%), male 57(57%), above poverty line 80(80%), fathers of school children were literate 96 (96%), mothers of school children were literate 95 (95%), did not fail in previous classes 76 (76%), always had parental motivation to study 47(47%), partially completed their homework 55 (55%),had no problem with teacher, subject and peer 88 (88%), had no parental fight 49 (49%), the screen was not used by family members in late night 72 (72%), did not use long term medication 90 (90%) ,had habit of taking 1 cup of tea/ coffee 38 (38%) and studied early in morning 44 (44%) among low achievers

Majority of school children were in the age group of 13 years 46 (46%), female 56 (56%), above poverty line 73(73%), fathers of school children were literate 99 (99%), mothers of school children were literate 93 (93%),did not fail in previous classes 93 (93%), sometimes had parental motivation to study 48 (48%),completed their homework 65 (65%), had no problem with the teacher, subject and peer 89 (89%), had no parental fight 51 (51%), the

screen was not used by family members 76 (76%), and no use of long term medication 95 (95%), had habit of taking 1 cup of tea/ coffee 40 (40%) and studied early in morning 63 (63%), among high achievers.

FINDINGS

The findings of the study are arranged based on objectives of the study.

Objective 1: To find the association between screen viewing and sleep among low and high achievers of school children.

- There was significant low negative correlation between screen viewing and sleep r= -0.219 (p=0.028) among low achievers.
- There was significant low negative correlation between screen viewing and sleep r=-0.265 (p=0.008) among high achievers.
- The high achievers sleep was higher than the low achievers sleep among school children t = -2.247 (P = 0.026).
- Low achievers screen viewing was significantly higher than high achievers screen viewing among school children. t = 4.051 (P < 0.001).

Objective 2: To find the association between the sleep and selected background factor among low and high achievers of school children.

- Among low achievers of school children, there was significant association between sleep and study habit, t = -3.5 (p=.001);
- There was no association between sleep and other background factors such as sex t = 0.772 (p=0.442); , failure in previous classes t = 0.162 (p=0.872); parental motivation to study t = 0.744 (p=0.459);parents fight among themselves t = 0.287 (p=0.775);use of screen by family members in late night t = 0.565 (p=0.573); find fresh to study t = -0.520 (p=0.604) among low achievers.

- Among high achievers, there was significant association between sleep and study habit, t= -3.08 (p=.003), use of screen by family members at late night t= 3.28 (p=0.002).
- There was no association between sleep and other background factors such as sex t = 0.079 (p=0.938); failure in previous classes t = -0.058 (p=0.954); parental motivation to study t = 1.027 (p=0.307); parents fight among themselves t = 1.716 (p=0.090), find fresh to study t = -1.165 (p=0.247) among high achievers.

Objective 3: To associate the screen viewing and selected background factors among low and high achievers of school children.

- Among low achievers, there was significant association between screen viewing and parents fighting among themselves, t = -2.386 (p=0.019).
- There was no association between screen viewing and other background factors such as sex t = -0.524 (p=0.602); , failure in previous classes t = 0.075 (p=0.941); study habit t = 0.354 (p=0.724) parental motivation to study t = -0.180 (p=0.858); use of screen by family members in late night t = -1.384 (p=-0.170); find fresh to study t = 1.038 (p=0.302) among low achievers.
- Among high achievers, there was significant association between screen viewing and sex t=-2.538 (p=0.013).
- There was no association between screen viewing and other background factors such as failure in previous classes t = -0.095 (p=0.924); study habit t=0.608(0.545) parental motivation to study t = -0.507(p=0.614); parents fighting among themselves t = -1.879 (p=0.064); use of screen by family members in late night t = -0.631 (p=0.530); find fresh to study t = -0.324(p=0.747) among high achievers.

DISCUSSION

The discussion of results was based on the findings of the study.

Findings 1: Findings on the association between screen viewing and sleep among low and high achievers of school children

- There was significant low negative correlation between screen viewing and sleep r = -0.219(p=0.028).
- There was significant negative correlation between screen viewing and sleep r=-0.265 (p=0.008) among high achievers.

The above findings were supported by the study conducted by Lis et. al (2007) which revealed that Television viewing > or =2 hours day on week ends, with a prevalence of 48.8% was the predominant risk factor for all sleep disorders with the exception of the sleep duration disorder. Toyran et. al, (2002) revealed that head ache, back pain eye symptoms and sleep problems were found to be more often among children who watched television longer ($p<0.05$).

- The high achievers sleep was higher than the low achievers sleep among school children t = -2.247 (P = 0.026).

The above findings was supported by the study which was conducted by keller et al (2008) which revealed that better sleep ameliorates the risk for academic performance difficulties.

- The low achiever's screen viewing was higher than high achiever's screen viewing among school children t = 4.051 (P< 0.001).

The above findings were supported by the studies conducted by Ozmert (2002) which revealed that TV viewing time had negative correlation with school achievement r=0.11(p=0.03). Bercedo et.al., (2001) revealed that children with lower school performance watched more television (p<0.001)

Findings 2: Findings on association between the sleep with background factors of low and high achievers.

- Among low achievers, there was significant association between sleep and study habit, t = -3.5 (p=.001).
- There was no association between sleep and other background factors such as sex t = 0.772 (p=0.442); failure in previous classes t = 0.162 (p=0.872); parental motivation to study t = 0.744 (p=0.459);parents fight among themselves t = 0.287 (p=0.775);use of screen by family members in late night t = 0.565 (p=0.573); find fresh to study t = -0.520 (p=0.604) among low achievers.
- Among high achievers, there was significant association between sleep and study habit, t= -3.08 (p=.003), use of screen by family members at late night t= 3.28 (p=0.002).
- There was no association between sleep and other background factors such as sex t = 0.079 (p=0.938); failure in previous classes t = -0.058 (p=0.954); parental motivation to study t = 1.027 (p=0.307); parents fight among themselves t = 1.716 (p=0.090), find fresh to study t = -1.165 (p=0.247) among high achievers.

Findings 3: Findings on association between the screen viewing with background factors of low and high achievers school children.

- Among low achievers, there was significant association between screen viewing and parents fight among themselves, t = -2.386 (p=0.019).

- There was no association between screen viewing and other background factors such as sex t = -0.524 (p=0.602); failure in previous classes t = 0.075 (p=0.941); study habit t = 0.354 (p=0.724) ;parental motivation to study t = -0.180 (p=0.858); use of screen by family members in late night t = -1.384 (p=-0.170); find fresh to study t = 1.038 (p=0.302) among low achievers.
- Among high achievers, there was significant association between screen viewing and sex t=-2.538 (p=0.013).
- There was no association between screen viewing and other background factors such as failure in previous classes t = -0.095 (p=0.924); study habit t=0.608(0.545) parental motivation to study t = -0.507(p=0.614); parents fight among themselves t = -1.879 (p=0.064); use of screen by family members in late night t = -0.631 (p=0.530); find fresh to study t = -0.324(p=0.747) among high achievers.

IMPLICATION

The main implications of this study in nursing are found in nursing service and nursing administration.

Nursing Service

- Both low and high achievers must be encouraged to sleep more and reduced screen viewing.
- Low achievers must be educated and trained regarding appropriate study habits.
- Family members must avoid late night screen viewing and unhealthy competition on screen viewing.
- The child's family must be educated especially the mother about for proper screen viewing habits for children during each visit.
- Nursing service should be intended from institution based service to the school level.

- Community health nurse should assess the screen viewing practices of children everyday and suggests appropriate measures for healthy viewing practices.
- Educate the community and hospital about impact of screen viewing and sleep among children through school health programme.
- Encourage parents to be role models for their children by participating in activities other than screen viewing.
- Mothers must be educated to modify the TV watching and computer usage habits in children with regard to duration and frequency of watching television and computer usage.

Nursing Research:

- The study will be a valuable reference and pathway for further researcher.
- The study finding serves as a basis for the professionals and the students to conduct further studies.
- Large scale studies can be conducted by various methods of research.

LIMITATION

- School children were selected from private school only.

RECOMMENDATIONS

The following recommendations are made on the basis of the present study.

- Similar study can replicate on a large scale.
- A comparative study can be conducted between the rural and urban set up.

CONCLUSION

The result of the present study shows that significant association between screen viewing and sleep among low achiever and high achievers of the school children. Therefore a regular health education programme can be implemented regarding the impact of screen viewing to the school children and teachers. Increasing sleep, reducing screen viewing, decreasing the competition on TV watching and avoiding fights among parents are essential lessons need to learnt by low achieving school children. Parents insight and co-operation in this regard will be a blessing for growing children.

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APPENDIX - I

LETTER SEEKING PERMISSION FOR CONTENT VALIDITY

From

30083614
II year M.Sc (Nursing),
Annai J K K Sampoorani Ammal College of Nursing
Komarapalayam,
Namakkal district.

To

Through

The Dean,
Annai J K K Sampoorani Ammal College of Nursing,
Komarapalayam,
Namakkal District.

Respected Sir/ Madam,

Sub: Letter requesting consent to validate the tool.

I am 30083614 II year M.Sc., Nursing student of Annai J K K Sampoorani Ammal College of Nursing Komarapalayam, under the Tamil Nadu Dr. M G R Medical University, Chennai.

As a partial fulfillment of M.Sc Nursing Programme, I am conducting "A study on screen viewing and sleep among low and high achievers of school children in selected school in krishnagiri"

Herewith I am sending the tool for content validity for your expert opinion. I humbly request yourself to spare a little of your valuable time for me which I remain ever grateful to you. I would be very kind of you to return the same undersigned at the earliest.

Thanking you

Place: Yours sincerely

Date: (30083614)

APPENDIX – II

LETTER SEEKING PERMISSION TO CONDUCT RESEARCH STUDY

LETTER SEEKING PERMISSION TO CONDUCT RESEARCH STUDY

From

30083614
II year M.Sc (Nursing),
Annai J K K Sampoorani Ammal College of Nursing,
Komarapalayam- 638183,
Namakkal District.

To

PRINCIPAL
Sri Vijay Vidyalaya Matric. Hr. Sec. School
KRISHNAGIRI - 635001.

Through

The Dean,
Annai J K K Sampoorani Ammal College of Nursing,
Komarapalayam- 638 183,
Namakkal District.

DEAN
Annai J.K.K.Sampoorani
Ammal College of Nursing
Komarapalayam - 638 183.

Respected sir/ madam,

Sub: Seeking permission to conduct the research study.

I am 30083614 , II year M.Sc., nursing student of Annai J K K Sampoorani Ammal College of Nursing, under the Tamil Nadu Dr. M G R Medical University, Chennai.

As a partial fulfillment of university requirement for an award of Master of Science in Nursing Degree, I am conducting a research on the following topic: **"A study on screen viewing and sleep among high and low achievers of school children in selected school in krishnagiri".**

I would like to conduct the research in your esteemed institution. Please grant permission for the same.

Thanking you

Place:
Date:

yours sincerely,
30083614

Permission granted

APPENDIX - III

LIST OF EXPERTS

1. Dr. Mrs.TAMILMANI, M.Sc., (N), Phd.,
   Principal
   Annai JKK Sampoorani Ammal College of Nursing.
   Komarapalayam.

2. Mrs.KAVIMANI, M.Sc., (N)
   Principal
   SPM College of Nursing
   Erode.

3. Ms. SHOBANA, M.Sc., (N)
   Department of medical surgical nursing.
   Annai JKK Sampoorani Ammal College of Nursing.
   Komarapalayam.

4. Ms. ALLWIN, M.Sc., (N)
   Department of Paediatrics.
   Annai JKK Sampoorani Ammal College of Nursing.
   Komarapalayam.

5. Ms. L. SHEELADEVI, M.Sc., (N)
   Department of Paediatrics .
   Annai JKK Sampoorani Ammal College of Nursing.
   Komarapalayam.

6. Mrs. PRATHIPA,
   Departmenr of psychology
   Annai JKK Sampoorani Ammal College of Nursing.
   Komarapalayam.

7. Dr. SENTHIL MD.
   Hari Hospital,
   Erode.

8. Dr. SHYAMALA, B.D.S
   Research epidemiologist
   239 Chinna kadai street
   Salem-1

APPENDIX - IV

CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool of 30083614 II year M.Sc (Nursing), student who is undertaking "A study on screen viewing and sleep among low and high achievers of school children in selected school in krishnagiri".

Place: Komarapalayam

Date:

Signature of the expert

Designation

APPENDIX – V

QUESTIONNAIRE ON SCREEN VIEWING AND SLEEP AMONG SCHOOL CHILDREN

Instruction

This section deals with issues related to background factors use of screen viewing and sleep among school children. The interviewer will pose questions and read the response one by one listed below place a tick mark (✓) in the appropriate response given by respondent.

SECTION – A BACKGROUND FACTORS

1. State your age?
   a. 13 years ☐
   b. 14 Years ☐
   c. 15 Years ☐

2. State the sex?
   a. Male ☐
   b. Female ☐

3. State the family income Rs _____ / month?
   a. Above poverty line (above 60,000/ year) ☐
   b. Below poverty line (Below 60,000/ year) ☐

4. State the educational status of the father?
   a. Literate. ☐
   b. Illiterate ☐

5. State the educational status of the mother?

c. Literate. ☐

d. Illiterate ☐

6. Did you ever fail in previous classes?

a. Yes ☐

b. No ☐

7. How do you rate your study habit?

a. Complete the homework ☐

b. Partially complete the homework ☐

c. Unable to do homework. ☐

8. Do you have problem with any of the following?

a. Subjects. ☐

b. Teachers. ☐

c. Peers. ☐

d. None. ☐

9. How often do your parents motivate you to study?

a. Always ☐

b. Sometimes ☐

c. Never ☐

10 .How often do your parents fight among themselves?

a. Always ☐

b. Sometimes ☐

c. Never ☐

11. Do any of your family members watch TV or use computer late in the night?

a. Yes ☐

b. No ☐

12. Do you taking any medication for long time?

a. Yes ☐

b. No ☐

13. How many cups of Tea or Coffee will you have per day?

a. 1 Cup ☐

b. 2 Cups ☐

c. More than 2 cups ☐

d. No habit ☐

14. When do you find yourself fresh to study?

a. Early morning ☐

b. Evening ☐

c. Night ☐

SECTION –B SCREEN VIEWING

1. How often do you watch T.V?

a. Every day ☐

b. Few days in a week ☐

c. Once in a while ☐

2. Since how many years do you have been watching T.V?

a. Less than 1 year ☐

b. 1 -2 Years ☐

c. More than 2 Years ☐

3. How many hours do you watch T.V in a day?

a. Less than 1 hour. ☐

b. 1 - 2 hours. ☐

c. More than 2 hours. ☐

4. In a week, which day will you view T.V

a. Every day ☐

b. At the week end ☐

5. Specify your associated activities while watching T.V?

a. Playing games ☐

b. Doing homework. ☐

c. Eating ☐

d. Any other activities. _____ specify ☐

e. No Other Activities ☐

6. Do you watch T.V. late night?

a. Yes ☐

b. No ☐

7. What type of television show do you watch?

a. Comedy ☐

b. Movies ☐

c. Games & Sports ☐

d. News ☐

e. Any other _____ specify. ☐

8. How often do you change the channels?

a. Often ☐

b. Some times ☐

c. Rarely ☐

d. Never ☐

9. Specify the distance between your seat and T.V. while watched it ____feet?

a. Less than 6 feet ☐

b. 6 – 7 feet ☐

c. More than 7 feet ☐

10. State the position which you most often assume while watching T.V?

a. Sitting in the floor ☐

b. Lying ☐

c. Reclining ☐

11. State the level at which the T.V. is placed?

a. Eye level ☐
b. Above eye level ☐
c. Below eye level ☐

12. How often do you use a computer?

a. Daily ☐
b. Few days in a week ☐
c. Once in a week ☐

13. How many hours in a day do you use a computer

a. < ½ hour ☐
b. ½ - 1 hour ☐
c. 1-2 hours ☐
d. > 2 hrs ☐

14. What do your use a computer for?

a. Word processing ☐
b. Drawing ☐
c. Computer games ☐
d. Internet ☐
e. E-Mail ☐
f. Any other _____ specify ☐

15. How much time do you spend on the internet per session?

a. Half an hour ☐
b. ½ hour -1 hour ☐
c. 1 hour -1 ½ hours ☐
d. More than 1 ½ hours ☐
e. Not applicable. ☐

16. State the distance between seat and the computer screen while using it?

a. ¾ feet ☐

b. 1 feet. ☐

c. >1 feet. ☐

17. Do you use any Google or material to reduce glare from computer?

a. Yes ☐

b. No ☐

18. How do you give rest to your eyes while using computer?

a. Closing eyes for few seconds ☐

b. Looking away from the screen ☐

c. None. ☐

19. While using computer specify the time interval you will take rest?

a. Once in 10 minutes ☐

b. Once in 11-20 minutes ☐

c. Once in 21-30 minutes. ☐

SECTION-C: SLEEP

1. Do you wake up at the same time each day?
   a. Yes ☐
   b. No ☐

2. Have you ever struggle to stay awake during the day?
   a. Nearly every day ☐
   b. 3-4 times a week ☐
   c. 1-2 times a week ☐
   d. Never ☐

3. Have you ever fallen asleep in the classroom?
   a. Yes ☐
   b. No ☐

4. If yes, how often does it occur?
   a. Nearly every day ☐
   b. 3-4 times a week ☐
   c. 1-2 times a week ☐
   d. Never ☐

5. How many hours do you sleep at night?
   a. 4-6 hours ☐
   b. 7-8 hours ☐
   c. 9-10hours ☐
   d. Above 10 hours. ☐

6. How long it usually take you to fall asleep?
   a. < 30 minutes ☐
   b. 30 minutes -1 hour ☐
   c. 1-2 hours ☐
   d. Above 2 hours ☐

7. Do you have any disturbance during sleep at night?

a. Yes ☐
b. No ☐

8. Whether you will wake up during sleep?

a. Yes ☐
b. No ☐

9. If yes how many times per night on average?

a. One ☐
b. Twice ☐
c. Three ☐
d. More than 3 times. ☐

10. Mention, if any symptoms you been having atleast weekly during the past month?

a. Morning headache ☐
b. Feeling anxious ☐
c. Feeling depressed ☐
d. Disturbing dreams and night mares ☐
e. None ☐

11. What is the quality of your sleep?

a. Extremely Good ☐
b. Very Good ☐
c. Good ☐
d. Adequate ☐

SCORING KEY

SECTION B

1. a) 3
b) 2
c) 1

2. a) 1
b) 2
c) 3

3 a) 1
b) 2
c) 3

4 a) 1
b) 2

5 a) 1
b) 1
c) 1
d) 1
e) 2

6 a) 2
b) 1

7 a) 1
b) 1
c) 1
d) 1
e) 1

8 a) 4
b) 3
c) 2
d) 1

9 a) 2
b) 1
c) 2

10 a) 2
b) 2
c) 1

11 a) 1
b) 2
c) 2

12 a) 3
b) 2
c) 1

13 a) 1
b) 2
c) 3
d) 4

14 a) 2
b) 1
c) 1
d) 1
e) 1
f) 1

15 a) 1
b) 2
c) 3
d) 4
e) 1

16 a) 2
b) 1
c) 2

17 a) 1
b) 2

18 a) 1
b) 2
c) 2

19 a) 1
b) 2
c) 3

SECTION C

1 a) 2
b) 1

2 a) 1
b) 2
c) 3
d) 4

3 a) 1
b) 2

4 a) 1
b) 2
c) 3
d) 4

5 a) 1
b) 2
c) 1
d) 1

6 a) 4
b) 3
c) 2
d) 1

7 a) 1
b) 2

8 a) 1
b) 2

9 a) 2
b) 1
c) 1
d) 1

10 a) 1
b) 1
c) 1
d) 1
e) 2

11 a) 4
b) 3
c) 2
d) 1

APPENDIX – VI

பள்ளிக் குழந்தைகளுக்கான திரைக்காணுதல் மற்றும் உறக்கத்தைப் பற்றிய கேள்வித் தொகுப்பு:

எண் :

பகுதி (அ) மறைமுக காரணிகள்

குறிப்புகள்:

இந்த பகுதியில் பள்ளிக் குழந்தைகளுக்கான மறைமுக காரணிகள், திரை காணுதல் மற்றும் உறக்கத்தைப் பற்றிய கேள்விகள் உள்ளன. நீங்கள் உங்களுக்குப் பொருத்தமானவற்றில் (√) சரி குறியீடுக. செய்தி யாரும் அறியா வண்ணம் பத்திரப்படுத்தப்படும்.

1. உங்களுடைய வயது?
   - அ. 13 வருடம ☐
   - ஆ. 14 வருடம ☐
   - இ. 15 வருடம ☐

2. பாலினம்
   - அ. ஆண் ☐
   - ஆ. பெண் ☐

3. குடும்ப மாத வருமானம் ரூபாய்
   - அ. வறுமைக் கோட்டிற்க்குக் கீழ் (வருடத்திற்கு 60,000 க்கு கீழே) ☐
   - ஆ. வறுமைக் கோட்டிற்க்குக்மேல் (வருடத்திற்கு 60,000 க்கு மேலே) ☐

4. தந்தையின் கல்வித் தகுதி
   - அ. படித்தவர் (எழுதவோ, படிக்கவோ தெரிந்தவர்) ☐
   - ஆ. பாமரர் (எழுதவோ, படிக்கவோ தெரியாதவர்) ☐

5. தாயின் கல்வித் தகுதி
   - அ. படித்தவர் (எழுதவோ, படிக்கவோ தெரிந்தவர்) ☐
   - ஆ. பாமரர் (எழுதவோ, படிக்கவோ தெரியாதவர்) ☐

6. முந்தைய வகுப்புகளில் தோல்வி அடைந்தது உண்டா?
   - அ. ஆம் ☐
   - ஆ. இல்லை ☐

7. உங்களுடைய படிக்கும் பழக்கம் எப்படிப்பட்டது.

அ. வீட்டுப்பாடத்தை முழுவதுமாக செய்வேன் ☐

ஆ. வீட்டுப்பாடத்தை பகுதியாக முடிப்பேன். ☐

இ. வீட்டுப்பாடத்தை செய்ய முடிவதில்லை. ☐

8. கீழே உள்ள ஏதேனும் உங்களுக்கு தொந்தரவு வாய்ந்ததாக உள்ளதா?

அ. பாடம் ☐

ஆ. ஆசிரியர்கள் ☐

இ. நண்பர்கள் ☐

ஈ. எதுவுமில்லை ☐

9. எத்தனை முறை பெற்றோர் உங்களை படிப்பதற்கு அறிவுறுத்துகிறார்கள்.

அ. எப்பொழுதும் ☐

ஆ. அவ்வப்போது ☐

இ. என்றும் இல்லை ☐

10. உங்களுடைய பெற்றோர் எப்பொழுது தங்களுக்குள் சண்டையிட்டு கொள்வார்கள்.

அ. எப்பொழுதும் ☐

ஆ. அவ்வப்போது ☐

இ. என்றும் இல்லை ☐

11. குடும்ப நபர்கள் யாரேனும் கணினி அல்லது தொலைக்காட்சியை இரவில் நீண்ட நேரம் பார்ப்பவர்களா?

அ. ஆம் ☐

ஆ. இல்லை ☐

12. ஏதாவது மருந்து வகைகளை நீண்ட காலமாக எடுத்துக் கொள்வீர்களா?

அ. ஆம் ☐

ஆ. இல்லை ☐

13. எத்தனை டம்ளர் காபி அல்லது டீ தினமும் அருந்துவீர்கள்?

அ. 1 டம்ளர் ☐

ஆ. 2 டம்ளர் ☐

இ. 2க்கு மேலே ☐

ஈ. அருந்தும் பழக்கமில்லை ☐

14. படிப்பதற்க்கு உங்களுக்கு உகந்த நேரம் எது.?

அ. அதிகாலை ☐

ஆ. மாலை ☐

இ. இரவு. ☐

பகுதி- ஆ : திரைக்காணுதல் பற்றிய விவரம்

1. எத்தனை தடவை நீங்கள் தொலைக்காட்சி காண்பீர்கள்

அ. தினமும் ☐

ஆ. வாரத்தில் சில நாட்கள் ☐

இ. சந்தர்ப்பம் ஏற்படும் பொழுது ☐

2. எத்தனை வருடங்களாக தொலைக்காட்சி பார்க்கிறீர்கள்?

அ. 1 வருடத்திற்க்கும் குறைவாக ☐

ஆ. 1 ல் இருந்து 2 வருடங்களாக ☐

இ. 2 வருடங்களுக்கு மேலாக ☐

3. எத்தனை மணி நேரம் தினமும் தொலைக்காட்சி பார்க்கும் பழக்கமுடையவர்

அ. 1 மணி நேரத்திற்கு குறைவாக ☐

ஆ. 1 ல் இருந்து 2 மணி நேரம் ☐

இ. 2 மணி நேரத்திற்கு மேல். ☐

4. வாரத்தின் எந்த நாட்களில் தொலைக்காட்சி காண்பீர்கள்

அ. எல்லா நாட்களும் ☐

ஆ. வார இறுதி நாட்களில் ☐

5. தொலைக்காட்சி பார்க்கும் போது செய்யும் வேறு செயல்கள் என்ன?

அ. விளையாட்டு ☐

ஆ. வீட்டுப்பாடங்கள் செய்வது. ☐

இ. சாப்பிடுவது. ☐

ஈ. வேறு ஏதேனும் வேலைகள் - குறிப்பிடுக. ☐

உ. எந்த வேலையும் செய்வதில்லை. ☐

6. நீங்கள் நள்ளிரவில் தொலைக்காட்சி பார்ப்பீர்களா?

அ. ஆம் ☐

ஆ. இல்லை ☐

7. நீங்கள் எந்த வகையான தொலைக்காட்சி நிகழ்ச்சிகளைக் காண்பீர்கள்?

அ. பொம்மைப்படம் ☐

ஆ. திரைப்படம் ☐

இ. விளையாட்டு ☐

ஈ. செய்திகள் ☐

உ. வேறு ஏதேனும் - குறிப்பிடுக. ☐

8. நீங்கள் தொலைக்காட்சி அலைவரிசையை எத்தனை தடவை மாற்றுவீர்கள்?

அ. அடிக்கடி ☐

ஆ. சிலசமயம் ☐

இ. எப்பொழுதாவது ☐

ஈ. மாற்றம் செய்வது இல்லை ☐

9. தொலைக்காட்சி நோக்கும் போது உங்கள் இருக்கைக்கும் தொலைக்காட்சிக்கும் உள்ள இடைவெளி எவ்வளவு அடிகள்

அ. 6 அடிக்கும் குறைவாக ☐

ஆ. 6-7 அடிகள் வரை ☐

இ. 7 அடிக்கும் அதிகமாக ☐

10. நீங்கள் தொலைக்காட்சி நோக்கும் போது நீங்கள் எந்த நிலையில் இருப்பீர்கள்?

அ. தரையில் அமர்ந்து இருத்தல் ☐

ஆ. படுத்த நிலையில் ☐

இ. நாற்காலியில் சாய்ந்து அமர்ந்த நிலையில் ☐

11. உங்கள் தொலைக்காட்சி எவ்வளவு உயரத்தில் உள்ளது?

அ. கண் காணும் அளவில் ☐

ஆ. கண் காணும் அளவிற்க்கு மேல் ☐

இ. கண் காணும் அளவிற்க்கு கீழ் ☐

12. நீங்கள் எத்தனை தடவை கணினி உபயோகிப்பீர்கள்

அ. தினமும் ☐

ஆ. வாரத்தில் சில நாட்கள் ☐

இ. சந்தர்ப்பம் ஏற்படும் பொழுது ☐

13. ஒரு நாளைக்கு எவ்வளவு நேரம் கணினி உபயோகிப்பீர்கள்

அ. ½ மணி நேரத்திற்கு குறைவாக ☐

ஆ. ½ - 1 மணி நேரம் ☐

இ. 1-2 மணி நேரம் ☐

ஈ. 2 மணி நேரத்திற்கு மேல் ☐

14. நீங்கள் எதற்காக கணினி உபயோகிப்பீர்கள்?

அ. செயல்முறை சொற்கள் ☐

ஆ. படம் வரைதல் ☐

இ. கணிப்பொறி விளையாட்டுகள் ☐

ஈ. இணைய தளம் ☐

உ. மின்னஞ்சல் ☐

ஊ. வேறு ஏதேனும் ☐

15. நீங்கள் எவ்வளவு நேரம் இணையதளத்தில் செலவிடுவீர்கள்?

அ. ½ மணி நேரத்திற்கு குறைவாக ☐

ஆ. ½ - 1 மணி நேரம் ☐

இ. 1- ½ மணி நேரம் ☐

ஈ. 1 ½ மணி நேரத்திற்கு மேல் ☐

உ. பொருந்தாது. ☐

16. உங்கள் இருக்கைக்கும் கணினி திரைக்கும் இடையில் உள்ள இடைவெளி என்ன?

அ. ¾ அடி ☐

ஆ. 1 அடி ☐

இ. 1 அடிக்கும் குறைவு ☐

17. கணினியினால் கண் கூசுவதை தடுக்க நீங்கள் ஏதேனும் கண்ணாடி அல்லது திரை உபயோகிக்கிறீர்களா?

அ. ஆம் ☐

ஆ. இல்லை ☐

18. கணினி உபயோகிக்கும்போது கண்களுக்கு எவ்வாறு ஓய்வு அளிப்பீர்கள்?

அ. 1 நிமிடத்திற்கு கண்களை மூடுதல் ☐

ஆ. திரையில் இருந்து வெளியே பார்த்தல் ☐

இ. எதுவும் இல்லை ☐

19. கணினி உபயோகிக்கும்போது ஓய்வு எடுக்க எவ்வளவு நேரம் எடுப்பீர்கள்?

அ. 10 நிமிடத்திற்கு ஒரு முறை ☐

ஆ. 11-20 நிமிடங்களுக்கு ஒரு முறை ☐

இ. 21- 30 நிமிடங்களுக்கு ஒரு முறை ☐

பகுதி- இ உறக்கம் பற்றிய விவரம்

1. எல்லா நாட்களும் காலையில் ஒரே நேரத்தில் கண் விழிப்பீர்களா?

அ. ஆம் ☐

ஆ. இல்லை ☐

2. நீங்கள் காலை வேளையில் கண் விழிப்பதற்க்கு கடினப்பட்டதுண்டா?

அ. எல்லா நாட்களும் ☐

ஆ. வாரத்திற்க்கு 3-4 தடவை ☐

இ. வாரத்திற்கு 1-2 தடவை ☐

ஈ. இல்லை ☐

3. நீங்கள் வகுப்பறையில் எப்பொழுதாவது தூங்கியதுண்டா?

அ. ஆம் ☐

ஆ. இல்லை ☐

4. ஆம் எனில், எத்தனை தடைவ தூங்குவீர்கள்?

அ. எல்லா நாட்களும் ☐

ஆ. வாரத்திற்க்கு 3-4 தடவை ☐

இ. வாரத்திற்கு 1-2 தடவை ☐

ஈ. இல்லை ☐

5. நீங்கள் இரவில் எவ்வளவு நேரம் உறங்குவீர்கள்?

அ. 4-6 மணி நேரம் ☐

ஆ. 7-8 மணி நேரம் ☐

இ. 9-10 மணி நேரம் ☐

ஈ. 10 மணி நேரத்திற்கு மேல் ☐

6. நீங்கள் உறங்க ஆரம்பிப்பதற்கு எவ்வளவு நேரம் ஆகும்?

அ. 30 நிமிடங்களுக்கு குறைவாக ☐

ஆ. 30 நிமிடம்- 1 மணி நேரம் ☐

இ. 1-2 மணி நேரம் ☐

ஈ. 2 மணி நேரத்திற்கு மேல் ☐

7. உங்களுக்கு இரவு உறங்கும்போது ஏதேனும் தொந்தரவு உள்ளதா?

அ. ஆம் ☐

ஆ. இல்லை ☐

8. இரவு உறக்கத்திலிருந்து நீங்கள் விழித்ததுண்டா?

அ. ஆம் ☐

ஆ. இல்லை ☐

9. ஆம் எனில், ஒரு இரவில் சுமாராக எத்தனை தடவை விழிப்பீர்கள்?

அ. 1 தடவை ☐

ஆ. 2 தடவை ☐

இ. 3 தடவை ☐

ஈ. 3 தடவைக்கும் மேல் ☐

10. கீழ்க்காணும் அறிகுறிகளில் ஏதேனும் இருப்பதாக கடந்த மாதத்தில் உணர்ந்தீர்களா?

அ. காலையில் தலைவலி ☐

ஆ. பயம் ☐

இ. தளர்ச்சியாக உணர்தல் ☐

ஈ. கனவு மற்றும் இரவில் விழித்தல் ☐

உ. எதுவும் இல்லை ☐

11. உங்கள் உறக்கத்தின் தன்மை என்ன?

அ. மிக மிக நல்லது. ☐

ஆ. மிக நல்லது. ☐

இ. நல்லது ☐

ஈ. போதுமானது. ☐

ABSTRACT

A study on screen viewing and sleep among school children in selected schools in Krishnagiri, Tamilnadu, in partial fulfillment of the requirement for the award of the degree of Master of Science in Nursing. It is done by 30083614 from Annai J.K.K Sampoorani Ammal college of nursing, under the Tamilnadu Dr. MGR medical university , Chennai, March - 2010.

The objectives of the study were to find the association between screen viewing and sleep among low and high achievers of school children,to find out the association among selected factors and sleep among low and high achiever of school children, to find out the association among the selected factors and screen viewing among low and high achievers of school children.

The hypothesis of the study were, H_1) There will be a significant association between screen viewing and sleep among high achievers of school children. H_2) There will be a significant association between screen viewing and sleep among low achievers of school children. H_3) There will be a significant association between the background factors and sleep among high and low achievers. H_4) There will be a significant association between the background factors and screen viewing among high and low achievers.

The literature review was presented under the following headings: 1.Studies related to screen viewing and sleep among school children, 2.Studies related to screen viewing and academic achievement among school children 3.Studies related to sleep and academic achievement among of school children 4.Studies related to screen viewing and sleep and academic achievement of school children.

The investigator developed a conceptual framework, based on system model. The research approach used was comparative, co-relational design.

A semi structured questionnaire were used to collect information regarding screen viewing and sleep among low and high achievers. The reliability of the tool was done by test re-test method. The reliability coefficient r=0.92 was high.

The main study was conducted at Sri Vijay Vidyala Matriculation School at Krishnagiri. The study conducted among 200 school children who fulfilled the sampling criteria, including 100 low achievers and 100 high achievers. The study samples were selected by quota sampling. The data obtained were edited, organized, analyzed and interpreted using SPSS version 10 software.

The findings of the study revealed that there is a significant association between screen viewing and sleep among low achievers and high achievers of school children. Fighting among parents, competition on screen viewing at late night are associated with academic achievement of school children.

Implication, limitations and recommendation were clearly defined and stated in the report of the study.